*Water Resources Research*

Supporting Information for

# Selecting appropriate model complexity: An example of tracer inversion for thermal prediction in enhanced geothermal systems

Hui Wu[1, 2], Zhijun Jin[1, 2, 3], Su Jiang[4], Hewei Tang[5], Joseph P. Morris[5], Jinjiang Zhang[1], Bo Zhang[1]

[1] School of Earth and Space Sciences, Peking University, Beijing, China.

[2] Institute of Energy, Peking University, Beijing, China

[3] Petroleum Exploration and Production Research Institute, SINOPEC, Beijing, 100083, China

[4] Department of Energy Resources Engineering, Stanford University, Stanford, CA, USA.

[5] Lawrence Livermore National Laboratory, Livermore, CA, USA.

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## Introduction

This supporting information provides the box plots of prior and posterior latent parameters in Fig. S1. Fig. S2 shows two randomly selected posterior realizations in terms of aperture distribution and flow field. Fig. S3 shows the standard deviation of aperture distribution/flow field in posterior ensemble.

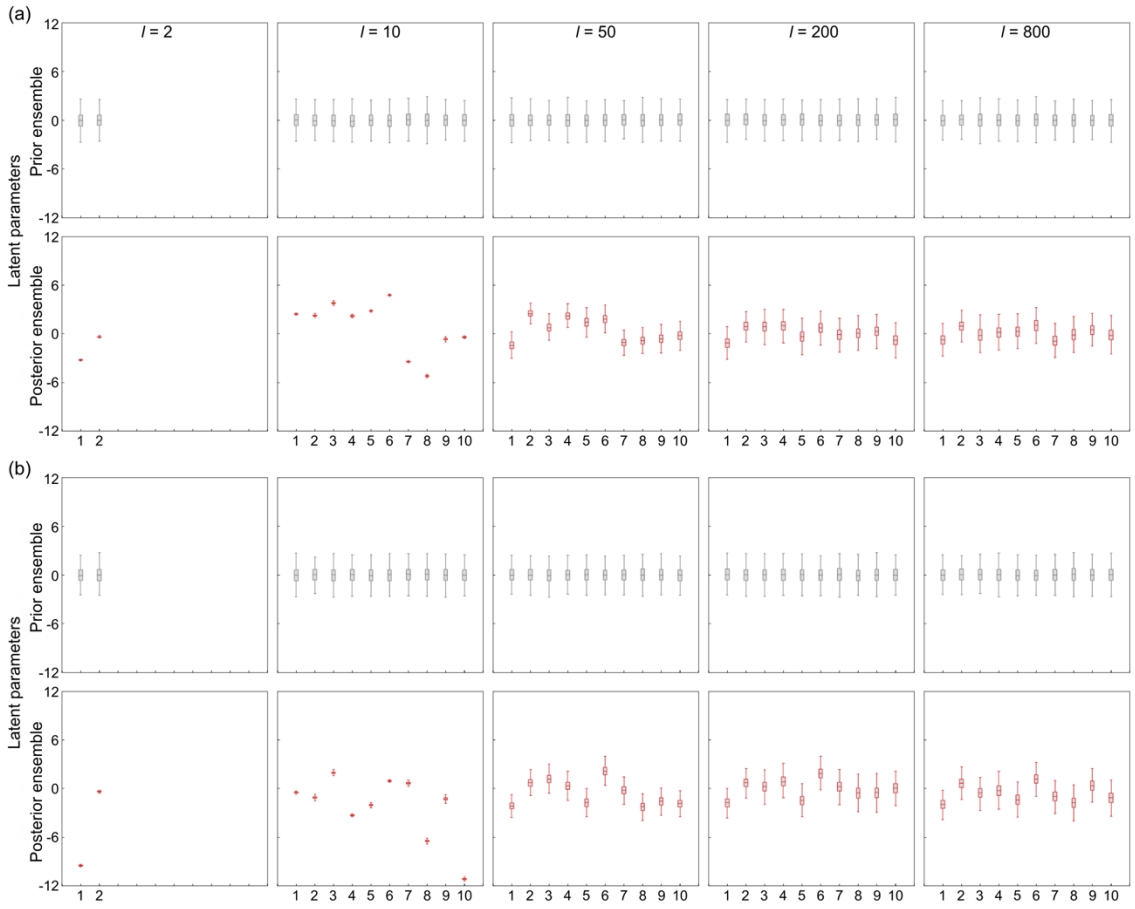


**Figure S1.** Box plots of ten latent parameters from prior (upper row) and posterior (lower row) ensembles. The ten latent parameters correspond to the ten most significant principal components after PCA. (a) Log-normal aperture field scenario. (b) Two facies aperture field scenario. For the latent space with a dimensionality ($l$) of two, only two latent parameters are shown.

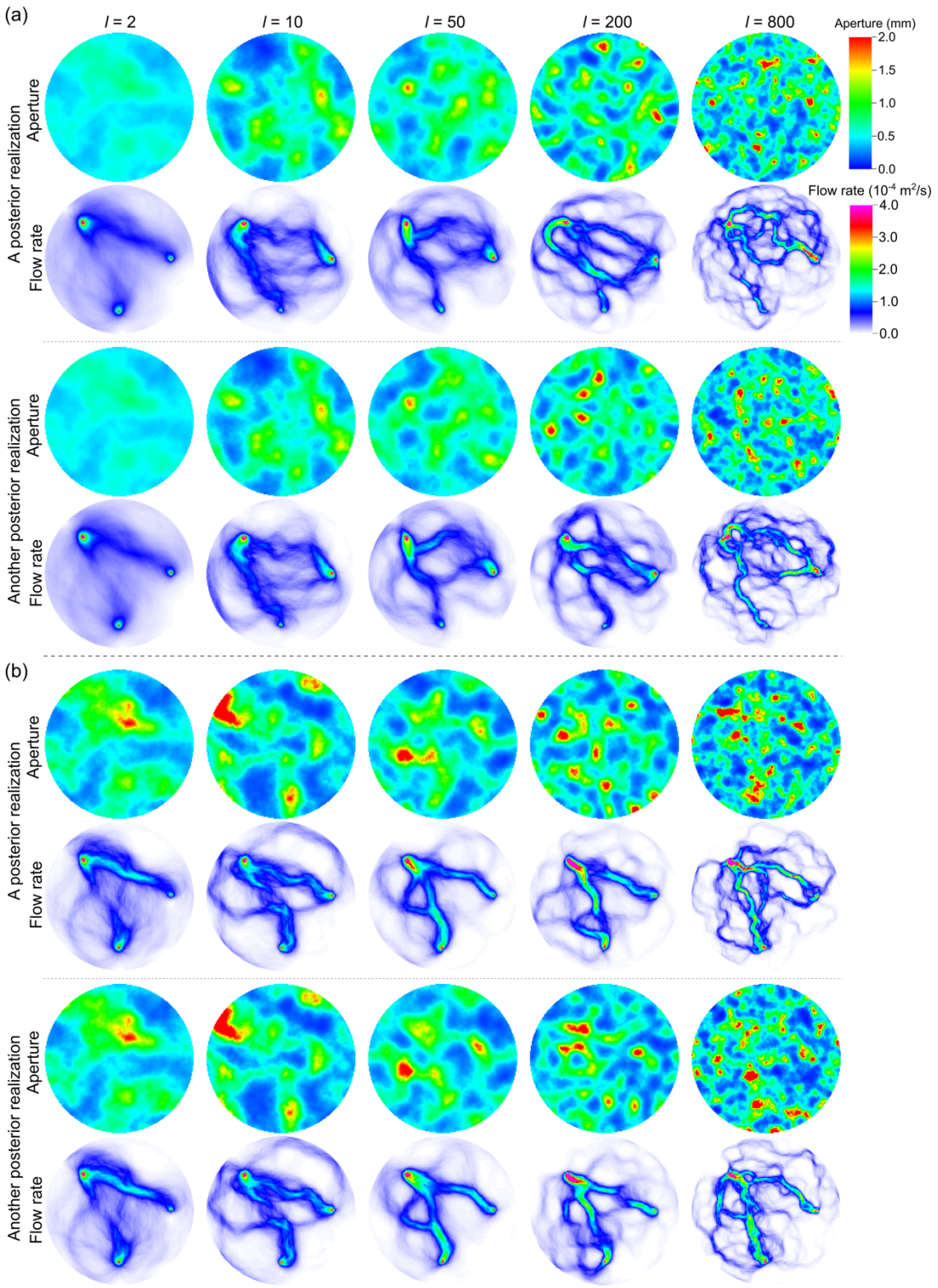


**Figure S2**. Aperture distribution and flow field from two randomly selected posterior realizations. (a) Log-normal aperture field scenario. (b) Two facies aperture field scenario.

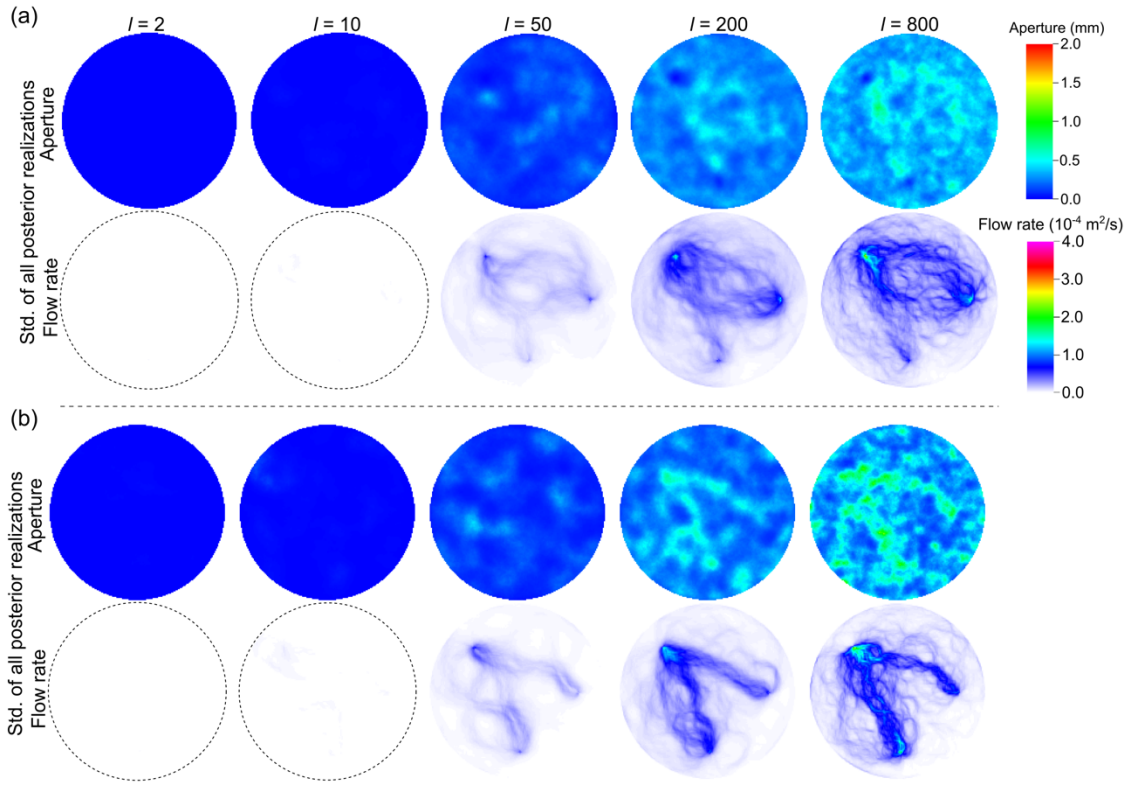


**Figure S3**. Standard deviation (Std.) of aperture distribution and flow field in the posterior ensemble. (a) Log-normal aperture field scenario. (b) Two facies aperture field scenario.